

REMARKS

Claims 1-30 are pending in the application. Claims 1 and 15 are amended above to more clearly set forth what the Applicant regards as the invention. No new matter has been added to the application by way of these specification and claim amendments.

I. THE ANTICIPATION REJECTION

The examiner rejected claims 1-27 for being anticipated by Maalouf (USPA 2002/0122002). Claims 1-27 are novel because the examiner has misunderstood the relevance Maalouf to the presently claimed invention.

Independent claims 1 and 15 are directed to a structure that includes a plurality of input channels, a sampler, a processor and a steering time delay. One aspect of the invention of claims 1 and 15 is the order in which the structural elements are connected. Claims 1 and 15 requires that the space-time processing (claim 1) or signal processing (claim 15) takes place before the steering delays are added to the plurality of processed signals. This aspect of the invention is described in the specification on page 3, line 20-30. The same page 3 paragraph also describes the important and previously unrecognized benefit of processing the signals in this order, .i.e. a significant computational load reduction as well as the maintenance of a linear relationship between the angular location of a return and its Doppler shift.

Maalouf does not disclose or suggest this key aspect of the present invention. Moreover, Maalouf does not even discuss the problem solved by the present invention. Instead, Maalouf shows a beamformer where the outputs from the multiple tapped delay line structures 150 go directly to summer 140. As noted above, in the presently claimed invention, a time delay steering means which is not disclosed by Maalouf, is located after the application of the space time signal processing but before the summer. For at least these reasons, claims 1-27 are novel and patentable because Maalouf does not disclose every feature of the claimed invention.

II. THE OBVIOUSNESS REJECTION

The examiner rejected claims 28-30 for being obvious over Maalouf. It is the examiner's position that Maalouf discloses all of the features of claims 28-30 except for specifying that the beamformer is used in a radar application. It is the examiner's position that it is well known that

beamformers are used in the radar field.

Claims 28-30 are non-obvious and patentable over Maalouf at least because Maalouf does not disclose the features of independent claim 15 upon which claims 28-30 depend as set forth in Section I above.

CONCLUSION

Claims 1-30 are believed to be patentable for the reasons recited above. Favorable reconsideration and allowance of all pending application claims is, therefore, courteously solicited.

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